

<p>U.S. DEPARTMENT OF TRANSPORTATION</p> <p>FEDERAL AVIATION ADMINISTRATION</p> <p>TYPE CERTIFICATE DATA SHEET</p> <p>E4EA</p>	<p>TCDS NUMBER E4EA</p> <p>REVISION: 28*</p> <p>DATE: July 17, 2020</p>			
	PRATT & WHITNEY CANADA CORP.			
	MODELS:			
	PT6A-6	PT6A-6A	PT6A-6B	PT6A-6/C20
	PT6A-11	PT6A-11AG	PT6A-15AG	PT6A-20
	PT6A-20A	PT6A-20B	PT6A-21	PT6A-25
	PT6A-25A	PT6A-25C	PT6A-27	PT6A-28
	PT6A-29	PT6A-34	PT6A-34B	PT6A-34AG
	PT6A-35	PT6A-36	PT6A-38	PT6A-41
	PT6A-41AG	PT6A-42	PT6A-42A	PT6A-45
	PT6A-45A	PT6A-45B	PT6A-45R	PT6A-50
	PT6A-52	PT6A-60A	PT6A-60AG	PT6A-61
	PT6A-65B	PT6A-65R	PT6A-65AR	PT6A-65AG
	PT6A-110	PT6A-112	PT6A-114	PT6A-114A
	PT6A-116	PT6A-121	PT6A-135	PT6A-135A
	PT6A-140	PT6A-140AG	PT6A-140A	
	PT6B-9	PT6D-114A		

Engines of models described herein conforming with this data sheet (which is part of Type Certificate Number E4EA) and other approved data on file with the Federal Aviation Administration, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations, provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

TYPE CERTIFICATE (TC) HOLDER: Pratt & Whitney Canada Corp.
1000 Marie-Victorin
Longueuil, Quebec, Canada J4G 1A1

TYPE I	Free turbine turbo-prop / 3 axial plus one centrifugal stage compressor / single annular combustion chamber, single-stage gas generator turbine / single-stage power turbine
MODELS	PT6A-6, -6A, -6B, -6/C20, -11, -11AG, -15AG, -20, -20A -20B, -21, -25, -25A, -25C, -27, -28, -29, -34, -34B, -34AG, -35, -36, -110, -112, -114, -114A, -116, -121, -135, -135A, -140, -140AG, -140A, PT6D-114A

TYPE II	Free turbine turbo-prop / 3 axial plus one centrifugal stage comp / single annular combustion chamber / single stage gas generator turbine / two stage power turbine
MODELS	PT6A-38, -41, -41AG, -42, -42A, -45, -45A, -45B, -45R, -50, -52, -60A, -60AG, -61

TYPE III	Free turbine turbo-prop / 4 axial plus one centrifugal stage comp / single annular combustion chamber / single stage gas generator turbine / two stage power turbine
MODELS	PT6A-65B, -65R, -65AR, -65AG

TYPE IV	Free turbine turboshaft / 3 axial plus one centrifugal stage comp / single annular combustion chamber / single stage gas generator turbine / single stage power turbine
MODELS	PT6B-9

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LEGEND: "-" INDICATES "SAME AS PRECEDING MODEL"

"---" NOT APPLICABLE

NOTE: ALL PAGES ARE RE-FORMATTED. SIGNIFICANT CHANGES, IF ANY, ARE BLACK-LINED IN THE LEFT MARGIN

I. MODELS	PT6A-6	PT6A-6A	PT6A-6B	PT6A-11, -11AG	PT6A-20, -20A, -20B, -6/C20
RATINGS (See Note 1)					
Maximum continuous at sea level					
Equivalent shaft hp.	525	--	--	528(580,11AG)	579
Shaft hp.	500	--	--	500(550,-11AG)	550
Jet thrust, lb.	62	--	--	70(75,-11AG)	72
Output rpm	2,200	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Takeoff (5 min.) at sea level					
Equivalent shaft hp.	578	--	--	528(580,-11AG)	579
Shaft hp.	550	--	--	500(550,-11AG)	550
Jet thrust, lb.	70	--	--	--(75, 11AG)	72
Output rpm	2,200	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Maximum reverse					
Shaft hp.		500	--	475	500
Output rpm (max)		2,100	--	--	--

I. MODELS (Cont.)	PT6A-21,-25, -25A	PT6A-25C	PT6A-15AG, -27, -28	PT6A-29	PT6A-34,-34AG, -34B, -36
RATINGS (See Note 1)					
Maximum continuous at sea level					
Equivalent shaft hp.	580	783	715	778	783
Shaft hp.	550	750	680	750	--
Jet thrust, lb.	75	82	90	71	82
Output rpm	2,200	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Takeoff (5 min.) at sea level					
Equivalent shaft hp	580	783	715	778	783
Shaft hp.	550	750	680	750	--
Jet thrust, lb.	75	82	90	71	82
Output rpm	2,200	--	--	--	--
Gas generator rpm	38,100	--	--	--	--
Maximum reverse					
Shaft hp	500	720	620	750	720
Output rpm (max)	2,100	--	--	--	--

I. MODELS (Cont.)	PT6A-35	PT6A-110	PT6A-112	PT6A-114	PT6A-114A
RATINGS (See Note 1)					
Maximum continuous at sea level					
Equivalent shaft hp	787	502	528	632	725
Shaft hp	750	475	500	600	675
Jet thrust, lb.	93	68	70	79	124
Output rpm	2,190	1,900	--	--	--
Gas generator rpm	38,100	--	--	--	--
Takeoff (5 min.) at sea level					
Equivalent shaft hp	787	502	528	632	725
Shaft hp.	750	475	500	600	675
Jet thrust, lb.	93	68	70	79	124
Output rpm	2,190	1,900	--	--	--
Gas generator rpm	38,100	--	--	--	--
Maximum reverse					
Shaft hp.	720	455	475	600	675
Output rpm (max)	2,100	1,825	--	--	--

I. MODELS (Cont.)	PT6A-116	PT6A-121	PT6A-135,- 135A	PT6D-114A	PT6A-140
RATINGS (See Note 1)					
Maximum continuous at sea level					
Equivalent shaft hp.	736	647	787	729	912
Shaft hp.	700	615	750	680	867
Jet thrust, lb.	89	80	93	124	119
Output rpm	1,900	--	--	6,188	1900
Gas generator rpm	38,100	--	--	38,100	38,850
Takeoff (5 min.) at sea level					
Equivalent shaft hp.	736	647	787	729	912
Shaft hp.	700	615	750	680	867
Jet thrust, lb.	89	80	93	124	119
Output rpm	1,900	--	--	6,188	1900
Gas generator rpm	38,100	--	--	--	38850
Maximum reverse					
Shaft hp.	672	591	720	680	867
Output rpm (max)	1,825	--	--	5,940	1825

I. MODELS (Cont.)	PT6A-140AG	PT6A-140A
RATINGS (See Note 1)		
Maximum continuous at sea level		
Equivalent shaft hp.	911	945
Shaft hp.	867	900
Jet thrust, lb.	117	113
Output rpm	1900	--
Gas generator rpm	38850	--
Takeoff (5 min.) at sea level		
Equivalent shaft hp.	911	945
Shaft hp.	867	900
Jet thrust, lb.	117	113
Output rpm	1900	--
Gas generator rpm	38850	--
Maximum reverse		
Shaft hp.	867	900
Output rpm (max)	1825	--

II. MODELS (Cont.)	PT6A-38	PT6A-41, -41AG, -42 -42A	PT6A-45	PT6A-45A, -45B
RATINGS (See Note 1)				
Maximum continuous at sea level				
Equivalent shaft hp.	801	903	1,070	--
Shaft hp.	750	850	1,020	--
Jet thrust, lb.	127	134	127	--
Output rpm	2,000	--	1,700	--
Gas generator rpm	38,100	38,100	--	39,000
Takeoff (5 min.) at sea level				
Equivalent shaft hp.	801	903	1,174	1,229
Shaft hp.	750	850	1,120	1,173
Jet thrust, lb.	127	134	136	-- 140(-45B)
Output rpm	2,000	--	1,700	--
Gas generator rpm	38,100	38,100	--	39,000
Maximum reverse				
Shaft hp.	700	800	900	--
Output rpm (max)	1,900	--	1,650	--

II. MODELS (Cont.)	PT6A-45R	PT6A-50	PT6A-52	PT6A-60A	PT6A-60AG	PT6A-61
RATINGS (See Note 1)						
Maximum continuous at sea level	1,070	1,022	898	1,113	1,081	902
Equivalent shaft hp.	1,020	973	850	1,050	1,020	850
Shaft hp.	127	124	120	157	154	132
Jet thrust, lb.	1,700	1,210	2000	1,700	--	2,000
Output rpm	39,000	38,100	39,000	--	--	--
Gas generator rpm						
Takeoff (5 min.) at sea level	1,254	1,174	898	1,113	--	902
Equivalent shaft hp.	1,197	1,120	850	1,050	--	850
Shaft hp.	141	136	120	157	--	132
Jet thrust, lb.	1,700	1,210	2000	1,700	--	2,000
Output rpm	39,000	38,500	39,000	--	--	--
Gas generator rpm						
Maximum reverse	900	1,120	800	900	--	800
Shaft hp.	1,650	1,210	1900	1,650	--	1,900
Output rpm (max)						

III. MODELS	PT6A-65B	PT6A-65R	PT6A-65AR	PT6A-65AG	
RATINGS (See Note 1)					
Maximum continuous at sea level					
Equivalent shaft hp.	1,249	--	1,298	--	
Shaft hp.	1,173	--	1,220	--	
Jet thrust, lb.	189	--	194	--	
Output rpm	1,700	--	--	--	
Gas generator rpm	39,000	--	--	--	
Takeoff (5 min.) at sea level					
Equivalent shaft hp.	1,249	1,459	1,509	1,381	
Shaft hp.	1,173	1,376	1,424	1,300	
Jet thrust, lb.	189	209	214	202	
Output rpm	1,700	--	--	--	
Gas generator rpm	39,000	--	--	--	
Alternative takeoff (5 min. at sea level)					
Equivalent shaft hp.	---	1,308	--	---	
Shaft hp.	---	1,230	--	---	
Jet thrust, lb.	---	195	--	---	
Output rpm	---	1,700	--	---	
Gas generator rpm	---	39,000	--	---	
Maximum reverse					
Shaft hp.	900	--	--	--	
Output rpm (max)	1,650	--	--	--	

IV. MODELS (Cont.)	PT6B-9
RATINGS (See Note 1)	
Maximum continuous at sea level	
Equivalent shaft hp.	---
Shaft hp.	500
Jet thrust, lb.	124
Output rpm	6,230
Gas generator rpm	38,100
Takeoff (5 min.) at sea level	
Equivalent shaft hp.	---
Shaft hp.	550
Jet thrust, lb.	136
Output rpm	6,230
Gas generator rpm	38,100

COMPONENTS/ CONFIGURATION	Includes basic engine, fuel and ignition systems but excludes propeller governor (-6, -20 and PT6D-114A models only) and ignition power source.
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FUEL	<p>Fuels conforming to the current P&WC specification CPW 204, CPW46 and CPW381 (for AG engines). Refer to the current revision of Service Bulletins or Maintenance manuals as follows for approved fuel types:</p> <p>SB 1244 - PT6A-6, 6A, 6B, 6/C20, 20, 20A, 20B, 21, 27, 28, 34, 34B, 36, 114, 114A, 116, 135, 135A, 35, 25, 25A, 25C</p> <p>SB 12044 - PT6A-110, 112, 121, 11</p> <p>SB 12144 - PT6A-15AG, 11AG</p> <p>SB 1344 - PT6A-34AG</p> <p>SB 1604 - PT6D-114A</p> <p>SB 3044 - PT6A-38, 41, 42, 42A, 45A, 45B, 45R</p> <p>SB 13044 - PT6A-52, 60A, 61, 65B, 65R, 65AR</p> <p>SB 13244 - PT6A-60AG, 65AG</p> <p>SB 4044 - PT6A-50</p> <p>Maintenance Manual 3075742 PT6A-140</p> <p>Maintenance Manual 3079582 PT6A-140AG</p> <p>Maintenance Manual 3077182 PT6A-140A</p> <p>Emergency use of MIL-G-5572, Grades 80/07, 91/98, 100/130 and 115/145 is permitted for a total time period not exceeding 150 hours during any overhaul period. It is not necessary to purge the unused fuel from the system when switching fuel type</p>
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LUBRICATING OILS	<p>The following oils are eligible for these engines: Refer to the current revision of Service Bulletins or Maintenance manuals as follows for approved fuel types:</p> <p>SB 1001 - PT6A-6, 6A, 6B, 6/C20, 20, 20A, 20B, 21, 27, 28, 34, 34AG, 34B, 36, 114, 114A, 116, 135, 135A, 35, 25, 25A, 25C</p> <p>SB 12001 - PT6A-11, 11AG, 15AG, 110, 112, 121</p> <p>SB 1601 - PT6D-114A</p> <p>SB 3001 - PT6A-38, 41, 42, 42A, 45A, 45B, 45R</p> <p>SB 13001 - PT6A-52, 60A, 60AG, 61, 65AG, 65B, 65R, 65AR</p> <p>SB 4001 - PT6A-50</p> <p>Maintenance Manual 3075742 PT6A-140</p> <p>Maintenance Manual 3079582 PT6A-140AG</p> <p>Maintenance Manual 3077182 PT6A-140A</p>
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PRINCIPLE DIMENSIONS AND WEIGHT					
I. MODELS	PT6A-6	PT6A-6A	PT6A-6B	PT6A-11, -11AG	PT6A-20, -20A, -20B,-6/C20
PRINCIPAL DIMENSIONS, in.					
Length	61.89	--	--	--	--
Nominal diameter	18.29	--	--	--	--
Maximum radius (excluding exhaust ports)	10.85	--	--	11.50	-10.85
WEIGHT (DRY)	280	284	--	339 340(-11AG)	286(20, 6/C20) 289(20A, 20B)
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	4.20	4.40	--	3.18	4.14(20, 6/C20) 4.58(20A, 20B)
Aft of forward mount plane	---	---	---	---	---
Below engine centerline	0.34	--	--	0.26	0.45
Right of engine centerline	0.32	--	--	0.36	0.07(20, 6/C20) 0.08(20A, 20B)
REDUCTION GEAR RATIO	.0668:1	--	--	--	--

I. MODELS (Continued)	PT6A-21, -25, -25A	PT6A-25C	PT6A-15AG, -27, -28	PT6A-29	PT6A-34, -34AG, -34B,-36
PRINCIPAL DIMENSIONS, in.					
Length	61.89((62.91,- 25,-25A)	62.91	61.89	--	--
Nominal diameter	18.29(23.00, - 25, -25A)	23.00	18.29	--	--
Maximum radius (excluding exhaust ports)	10.85(16.00, - 25, -25A)	16.00	11.50	--	--
WEIGHT (DRY)	337 (-21) 362 (-25) 352 (-25A)	355	337	--	340 (353 -34B)
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	3.04(-21) 3.00(-25, -25A)	3.00	3.04	--	--(3.38 -34B)
Aft of forward mount plane	---	---	---	---	---
Below engine centerline	0.32(-21) 0.47(-25, -25A)	0.47	0.32	--	--(0.37 -34B)
Right of engine centerline	0.20(-21) 0.29(-25, -25A)	0.29	0.20	--	--(0.38 -34B)
REDUCTION GEAR RATIO	.0668:1	.0663:1	--	--	--

I. MODELS (Continued)	PT6A-110	PT6A-112	PT6A-114	PT6A-114A	PT6A-116
PRINCIPAL DIMENSIONS, in.					
Length, in.	61.89	--	61.89		--
Nominal diameter	18.29	--	18.29		18.06
Maximum radius (excluding exhaust ports)	11.50	--	11.73		11.50
WEIGHT (DRY)	343	--	359	360	348
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	3.80	--	3.88	--	3.87
Aft of forward mount plane	---	---	---	--	---
Below engine centerline	0.26	--	--	--	0.25
Right of engine centerline	0.34	--	0.38	--	0.35
REDUCTION GEAR RATIO	0.0576:1	--	--	--	--

I. MODELS (Continued)	PT6A-121	PT6A-135, -135A	PT6D-114A	PT6A-35	PT6A-140
PRINCIPAL DIMENSIONS, in.					
Length	61.89	--	52.8	61.89	64.14
Nominal diameter	18.29	--	18.29	--	18.92
Maximum radius (excluding exhaust ports)	11.50	--	11.73	--	14.32
WEIGHT (DRY)	343	347	297	334	416.7
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	3.8	3.87	0.19	3.87	4.27
Aft of forward mount plane	---	---	---	---	---
Below engine centerline	0.26	0.25	0.31	0.25	0.47
Right of engine centerline	0.34	0.35	0.25	0.35	0.36
REDUCTION GEAR RATIO	0.0576:1	--	0.1875	0.0663:1	0.0582:1

I. MODELS (Continued)	PT6A-140AG	PT6A-140A
PRINCIPAL DIMENSIONS, in.		
Length	64.14	--
Nominal diameter	18.62	--
Maximum radius (excluding exhaust ports)	11.40	--
WEIGHT (DRY)	385	--
CENTER OF GRAVITY (dry weight) (in.)		
Forward of mount plane	4.47	--
Aft of forward mount plane	0.33	--
Below engine centerline	0.26	--
REDUCTION GEAR RATIO	0.0582:1	--

II. MODELS (Continued)	PT6A-38	PT6A-41, -41AG, -42 -42A	PT6A-45	PT6A-45A, -45B
PRINCIPAL DIMENSIONS, in.				
Length	66.47	--	72.62	--
Nominal diameter	18.29	--	--	--
Maximum radius (excluding exhaust ports)	12.84	--	--	--
WEIGHT (DRY)	405	419	445	--
CENTER OF GRAVITY (dry weight)(in.)				
Forward of mount plane	2.49	--	5.38	5.38
Aft of forward mount plane	---	---	---	---
Below engine centerline	0.32	--	0.12	0.12
Right of engine centerline	0.19	--	0.27	0.27
REDUCTION GEAR RATIO	0.0663:1	--	0.0568:1	--

II. MODELS (Continued)	PT6A-45R	PT6A-50	PT6A-60A	PT6A-61	PT6A-60AG	PT6A-52
PRINCIPAL DIMENSIONS, in.						
Length	72.62	79.89	72.09	66.76	72.09	66.76
Nominal diameter	18.29	--	18.29	--	--	--
Maximum radius (excluding exhaust ports)	12.84	15.44	12.84	--	--	--
WEIGHT (DRY)	459	622	487	443	489	449
CENTER OF GRAVITY (dry weight) (in.)						
Forward of mount plane	5.38	---	5.22	2.630	5.22	2.51
Aft of forward mount plane	---	See NOTE	---	---	---	---
Below engine centerline	0.12	See NOTE	.300	--	--	.260
Right of engine centerline	0.27	See NOTE	.28	.29	.28	.330
REDUCTION GEAR RATIO	0.0568:1	0.0438:1	0.0568:1	0.0663:1	0.0568:1	0.0663:1

NOTE: For PT6A-50 C.G. location (dry weight) is 27.69 in. behind forward mounting ring, 0.27 in. below horizontal centerline and 0.15 in. left of vertical centerline.

III. MODELS	PT6A-65B	PT6A-65R	PT6A-65AR	PT6A-65AG	
PRINCIPAL DIMENSIONS, in.					
Length	74.79	--	--	--	
Nominal diameter	18.29	--	--	--	
Maximum radius	12.84	--	--	--	
WEIGHT (DRY)	495	496	501	--	
CENTER OF GRAVITY (dry weight) (in.)					
Forward of mount plane	3.75	--	--	--	
Aft of forward mount plane	---	---	---	---	
Below engine centerline	0.29	--	--	--	
Right of engine centerline	.17	--	--	--	
REDUCTION GEAR RATIO	0.0568:1	--	--	--	--

IV. MODELS	PT6B-9
PRINCIPAL DIMENSIONS, in.	
Length	58.68
Nominal diameter	18.06
Maximum radius (excluding exhaust ports)	10.85
WEIGHT (DRY)	255
CENTER OF GRAVITY (dry weight) (in.)	
Forward of mount plane	---
Aft of forward mount plane	22.08
Below engine centerline	0.13
Right of engine centerline	0.52
REDUCTION GEAR RATIO	0.1889:1

CERTIFICATION BASIS

Applicable to the following engines and serial numbers: FAR 21.29, CAR 13. (Except Serial numbers shown below which were certified under FAR 21.21, FAR 33-5 see **NOTE** below.

<u>MODEL</u>	<u>SERIAL NUMBER</u>	<u>APPLICATION</u>	<u>ISSUED/REVISED</u>	<u>WITHDRAWN</u>
PT6A-6	All	June 4, 1962	December 31, 1963	
PT6A-6A	All	April 6, 1965	May 28, 1965	
PT6A-6B	All	November 30, 1967	December 20, 1967	
PT6B-9	All	June 4, 1962	May 28, 1965	
PT6A-11	All	August 19, 1977	September 16, 1977	
PT6A-11AG	All	January 10, 1979	May 17, 1979	
PT6A-15AG	All	January 9, 1978	January 27, 1978	
PT6A-20	All	April 9, 1965	October 29, 1965	
PT6A-20A	All except 024103-024160	February 19, 1973	March 9, 1973	
PT6A-20B	All	August 20, 1973	October 2, 1973	
PT6A-6/C20	All	February 19, 1973	March 9, 1973	
PT6A-21	All	December 2, 1974	December 10, 1974	
PT6A-25	All except 058013-058018 058025-058040 058042-058047 058049-058055 058059-058064 058068-058073 058077-058084 058089-058204	May 5, 1976	May 6, 1976	
PT6A-25A	All	December 13, 1976	December 28, 1976	
PT6A-25C	All	March 5, 1990	June 8, 1990	
PT6A-27	All except 044878-040879 040883-040884 040894-040895 040899-040921 040929-040934 040937-040943 040946-040949 040982-040988 040993-040999 041006-041007 041015-041021 041027-041032 041036 041041-041044 041050-041053 041060-041063 041067-041098 041105-041110 041113-041146 041152-041156 041162-041175 041180-041194 041199-041201	November 15, 1966	December 20, 1967	
PT6A-28	All except 050676-050925 050928-050934	January 27, 1969	March 11, 1969	
PT6A-29	All	October 6, 1967	October 28, 1968	
PT6A-34	All except 056071-056075 056080-056081 056086-056090 056098-056107	April 29, 1971	November 11, 1971	
PT6A-34B	054011, 054012 only prior to 054007	July 20, 1976	August 4, 1976	
PT6A-34AG	All	February 3, 1977	February 14, 1977	
PT6A-35	All	October 24, 2001	May 29, 2002	

	PT6B-35F	All	August 10, 1979	March 26, 1982	July 17, 2020
	PT6A-36	All	December 13, 1973	December 13, 1973	
	PT6A-38	079156, 079157 only prior to 079153	May 12, 1975	May 30, 1975	
	PT6A-40	All	April 19, 1983	July 13, 1983	July 17, 2020
	PT6A-41	All	August 30, 1973	October 2, 1973	
	PT6A-41AG	All	December 21, 1978	May 17, 1979	
	PT6A-42	All	July 11, 1979	October 12, 1979	
	PT6A-42A	All	September 21, 1998	December 4, 1998	
	PT6A-45	All	May 12, 1975	May 30, 1975	
	PT6A-45A	All	March 25, 1976	April 22, 1976	
	PT6A-45B	All	March 2, 1979	March 29, 1979	
	PT6A-45	All	June 25, 1980	August 1, 1980	
	PT6A-50	All	September 21, 1976	October 22, 1976	
	PT6A-60	All	April 20, 1982	March 15, 1983	July 17, 2020
	PT6A-60A	All	April 19, 1983	November 7, 1983	
	PT6A-60AG	All	October 1, 1996	October 10, 1996	
	PT6A-61	All	April 20, 1982	March 15, 1983	
	PT6A-61A	All	January 6, 1984	May 1, 1985	July 17, 2020
	PT6A-65B	All	April 20, 1982	September 17, 1982	
	PT6A-65R	All	April 20, 1982	September 17, 1982	
	PT6A-65AR	All	January 6, 1984	May 1, 1985	
	PT6A-65AG	All	July 23, 1987	August 19, 1987	
	PT6A-110	All	August 8, 1980	February 15, 1981	
	PT6A-112	All	October 12, 1978	October 30, 1978	
	PT6A-114	All	December 21, 1982	May 21, 1984	
	PT6A-114A	All	October 4, 1989	March 19, 1990	
	PT6A-116	All	October 4, 1984	May 1, 1985	
	PT6A-121	All	April 12, 1982	August 3, 1982	
	PT6A-135	All	September 9, 1977	September 12, 1977	
	PT6A-135A	All	February 3, 1982	April 29, 1982	
	PT6D-114A	All	October 30, 1996	September 22, 1997	
	PT6A-52	All	May 26, 2006	May 31, 2007	

14 CFR Part 33, effective February 1, 1965, including Amendments 33-1 through 33-20.

The following models comply with 14 CFR Part 34, amendment 5a, effective October 23, 2013. See Note 11 for detailed summary of the certification basis for fuel venting and exhaust emissions.

MODEL	S/N	DATE OF APPLICATION	DATE OF TYPE CERTIFICATE NO. E4EA ISSUED/REVISED
PT6A-140	ALL	March 9, 2011	December 17, 2012
PT6A-140AG	ALL	May 15, 2014	October 1, 2015
PT6A-140A	ALL	May 15, 2014	October 1, 2015

NOTE: This Type Certificate Data Sheet reflects the certification basis and approval for those serial numbered model PT6A, PT6B and PT6D series engines listed under "Certification Basis". Two Type Certificates have been issued for administrative purposes: E4EA under FAR 21.29 for engines produced in Canada and E2NE under FAR 21.21 for engines produced in the United States. The type design for each model engine, regardless of where produced, is identical. The information on this Type Certificate Data Sheet applies to all Pratt & Whitney model PT6A, PT6B and PT6D series engines, including:

(A) Those serial numbered engines listed on and certificated under FAA Type Certificate E2NE, originally issued to Pratt & Whitney Aircraft Division of United Technologies Corporation, East Hartford, Connecticut, U.S.A. and reissued to Pratt & Whitney of Canada Ltd. (Formerly United Aircraft of Canada, Ltd.), Longueuil, Quebec, Canada.

(B) Those serial numbered engines listed above under "Certification Basis," certificated under this Type Certificate, E4EA, issued to Pratt & Whitney Canada Corp, Longueuil, Quebec, Canada.

NOTES

NOTE 1. ENGINE RATINGS:

The engine ratings are based on static sea level condition 29.92 in Hg pressure, compressor intake screen installed, no external accessory loads and no airbleed. These ratings are available up to the following compressor inlet air (dry) temperatures (°F).

	Maximum Continuous	Takeoff		Maximum Continuous	Takeoff
PT6A-6, -6A, -6B	64°F	70°F	PT6A-60AG	63°F	79°F
PT6A-20, -20A, - 20B, -6/C20	70	70	PT6A-61	115	115
PT6A-11	108	108	PT6A-65B	101	101
PT6A-11AG	90	90	PT6A-65R	101	82, 76(1)
PT6A-21	91	91	PT6A-65AR	101	82, 84(1)
PT6A-25, -25A	93	93	PT6A-65AG	101	71
PT6A-25C	87	87			
PT6A-15AG, -27	71	71	PT6A-110	101	101
PT6A-28	70	70	PT6A-112	133	133
PT6A-29	73	73	PT6A-114	136	136
PT6A-34, -34B, - 34AG	86	86	PT6A-114A	115	115
PT6A-35, -135A	93	93	PT6A-114A	115	115
PT6A-36	97	97	PT6A-116	105	105
PT6A-38	102	102	PT6A-121	91	91
			PT6A-135	85	85
PT6A-41, -41AG, - 42	106	106	PT6A-140	80	102
PT6A-42A	86	106	PT6A-140A	87.8	98.6
PT6A-45	79	59	PT6A-140AG	78.8	111.2
PT6A-45A	79	46			
PT6A-45B	84	52	PT6B-9	72	77
PT6A-45R	92°F	73, 52(1)°F			
PT6A-50	90	59, 93(2)	PT6D-114A	104	104
PT6A-52	142	142			
PT6A-60A	77	77			

1. Alternative Takeoff
2. Takeoff with Augmentation Fluid

NOTE 2.**TEMPERATURES:**

MODELS	PT6A-6, -6A, -6B,	PT6A-20, -20A, -20B, -6/C20, -28, -29	PT6B-9	PT6A-11, -11AG
	Maximum Rated Turbine Temperature as Indicated by the Average of 24 Gas Temp. Thermocouples	Maximum Rated Inter-Turbine Temperature as Indicated by the Average of 8 or 10 Gas Temp. Thermocouples	--	--
Takeoff	1821°F (994°C)	1382°F (750°C)	1380°F (750°C)	1292°F (700°C)
Maximum Continuous	1745°F (952°C)	1382°F (750°C)	1319°F (715°C)	1292°F (700°C)
Starting Transient (2 sec.)	1900°F (1038°C)	1994°F (1090°C)	1994°F (1090°C)	--

MODELS (cont.)	PT6A-21	PT6A-25, -25A	PT6A-15AG, -27, -112, -121
	Maximum Rated Inter-Turbine Temperature as Indicated by the Average of 8 or 10 Gas Temp. Thermocouples	--	--
Takeoff	1283°F (695°C)	1283°F (695°C)	1336°F (725°C)
Maximum Continuous	1283°F (695°C)	1283°F (695°C)	1336°F (725°C)
Starting Transient (2 sec.)	1994°F (1090°C)	--	1994°F (1090°C)

MODELS (cont.)	PT6A-34, -34B, -34AG, -25C	PT6A-35,-36,-114,-114A, -116,-135,-135A, PT6D-114A	PT6A-110
	Maximum Rated Inter-Turbine Temperature as Indicated by the Average 8 or 10 Gas Temp. Thermocouples	Maximum Rated Inter-Turbine Temperature as Indicated by the Average of 8 Gas Temp. Thermocouples	--
Takeoff	1454°F (790°C)	1481°F (805°C)	1265°F (685°C)
Maximum Continuous	1454°F (790°C)	1481°F (805°C)	1265°F (685°C)
Starting Transient (2 sec.)	1994°F (1090°C)	--	--

MODELS (cont.)	PT6A-38	PT6A-41, -41AG	PT6A-45	PT6A-42, -42A, -45A,-45B, -50
	Maximum Rated Inter-Turbine Temperature as Indicated by the Average of 8 Gas Temp. Thermocouples	--	-- (8 or 10)	--
Takeoff	1301°F (705°C)	1382°F (750°C)	1400°F (760°C)	1472°F (800°C)
Maximum Continuous	1301°F (705°C)	1382°F (750°C)	1400°F (760°C)	1472°F (800°C)
Starting Transient (5 sec.)	1832°F (1000°C)	--	--	--

NOTE 2.(continued)

MODELS (continued)	PT6A-45R	PT6A-61	PT6A-60A, -60AG, -52
	Maximum Rated Inter-Turbine Temperature as Indicated by the Average of 8 Gas Temp. Thermocouples	Maximum Rated Inter-Turbine Temperature as Indicated by the Average of 8 or 10 Gas Temp. Thermocouples	--
Takeoff	1553°F (845°C)	1472°F (800°C)	1508°F(820°C)
Maximum Continuous	1494°F (812°C)	1472°F (800°C)	1508°F (820°C) 1472°F(775°C)(-60AG)
Starting Transient (5 sec.)	1832°F (1000°C)	--	--
Alternate Takeoff	1472°F (800°C)	---	---

MODELS (continued)	PT6A-65B	PT6A-65R	PT6A-65AR	PT6A-65AG	
	Maximum Rated Inter-Turbine Temperature as Indicated by the Average of 8 or 10 Gas Temp. Thermocouples	--	--	--	
Takeoff	1508°F(820°C)	1553°F(845°C)	1571°F (855°C)	1508°F (820°C)	
Maximum Continuous	1490°F (810°C)	1539°F (835°C)	1544°F (840°C)	1508°F (820°C)	
Starting Transient	1832°F (1000°C)	--	--	--	
Alternate Takeoff	---	1490°F (810°C)	1508°F (820°C)	---	

MODELS (continued)	PT6A-140	PT6A-140AG	PT6A-140A
	Maximum Rated Inter-Turbine Temperature as Indicated by the Average of 8 Gas Temp. Thermocouples	--	--
Takeoff	1562 °F (850 °C)	1598 °F (870 °C)	--
Maximum Continuous	1517 °F (825 °C)	--	1580 °F (860 °C)
Starting Transient	1994 °F (1090 °C)	--	--

OIL TEMPERATURE LIMITS

All except:PT6A-41,-42,-42A,-45,-45A,-45B,-45R, -60A,-60AG,-61,-65AG,-65AR,-65B, -65R, -140, -140AG and -140A models, Oil Temperature Continuous minus 40°F (-40°C) to 210°F (99°C) except for MIL-L-7808 (where approved; See Lubricating Oils Page 6) for which the maximum allowable temperature is 185°F (85°C). Limited periods of 10 minutes of 220°F (104°C) are allowable, except on A-25, A-25A, A-25C, A-11 and A-11AG (5 minute maximum), and A-50 (15 minutes maximum).

PT6A-41,-42and -42A, Oil Temperature Continuous minus 40°F(-40°C) to 220°F(104°C). Maximum ground operation 230°F(110°C).

PT6A-45, -45A, -45B, -45R, -52, -60A, -60AG, -61, -65AG, -65AR, -65B and -65R Oil Temperature Continuous minus 40°F (-40°C) to 230°F (110°C).

PT6A-140, -140AG, and -140A, Oil temperature continuous at idle minus 40°F (-40°C) to 210°F (99°C). Oil temperature continuous at Take off and Max continuous 90 °F (32 °C) to 210°F (99°C). Limited periods of 10 minutes of 220°F (104°C) are allowable

FUEL TEMPERATURE LIMITS

Fuel temperature maximum fuel pump inlet of 135°F (57°C). Fuel temperature minimum fuel pump inlet of minus 65°F (-54°C) or 12 centistokes. See the specific installation manuals for additional details.

NOTE 3. PRESSURES:

Fuel: Minimum pressure at inlet to the engine fuel system shall not be less than 5 p.s.i. above true vapor pressure of the fuel. For emergency operation, with airframe boost pump inoperative, it must be such that vapor liquid ratio does not exceed 0.1 for continuous operation and does not exceed 0.3 for more than 10 hours in a pump overhaul life. PT6A-140 refer to the installation manual

Oil:

Operating range:

PT6A-6, -6A, -6B, -20, -20A, -20B, -6/C20, PT6B-9

28000 rpm gas generator speed and above:

65-85 p.s.i.g., 80 p.s.i.g. (max. B-9)

Below 28000 rpm gas generator speed:

40 p.s.i.g. (min.)

PT6A-11, -11AG, -15AG, -21, -27, -28, -29, -50, -110, -112, -121

27000 rpm gas generator speed and above, with an oil temperature of 140-158°F:

80-100 p.s.i.g.

Below 27000 rpm gas generator speed:

40 p.s.i.g. (min) 60 p.s.i.g. (-50)

PT6A-25, -25A, -25C

27000 rpm gas generator speed and above, with an oil temperature of 140-160°F:

65-85 p.s.i.g. 75-95 p.s.i.g. (A-25C)

Below 27000 rpm gas generator speed:

40 p.s.i.g. (min)

PT6A-34, -34B, -34AG, -35, -36, -114, -114A, -116, -135, -135A, -140, -140AG, -140A, PT6D-114A,

27000 rpm gas generator speed and above, with an oil temperature of 140-158°F:

85-105 p.s.i.g. 75-100 p.s.i.g. (B-35F)

85-120 p.s.i.g. (A-140, A-140AG)

90-130 p.s.i.g. (A-140A)

Below 27000 rpm gas generator speed:

40 p.s.i.g. (min)

PT6A-38, -41, -41AG, -42, -42A

27000 rpm gas generator speed and above, with an oil temperature of 140-160°F:

85-135 p.s.i.g. (PT6A-38)

105-135 p.s.i.g. (PT6A-41, -41AG)

100-135 p.s.i.g. (PT6A-40, -42, -42A)

Below 27000 rpm gas generator speed:

60 p.s.i.g. (min)

PT6A-45, -45A, -45B, -45R, -52, -60A, -60AG, -61, -65B, 65R, -65AR, -65AG

27000 rpm gas generator speed and above, with an oil temperature of 140-160°F:

90-135 p.s.i.g.

Below 27000 rpm gas generator speed:

60 p.s.i.g. (min)

NOTE 4.**ACCESSORY DRIVE PROVISIONS:** (All Models except -50)

The following accessory drive provisions are available and are included in the basic engine weight.

Driven by Gas Generator Turbine	Rotating Facing Drive Pad	Speed Ratio (to Turbine)	Maximum Torque (ft.-lbs.)		Maximum Overhang (in. - lbs.)
			Continuous	Static	
Tachometer, Accessory Gearbox	CC	0.112	7	100	10
Starter and/or Generator	C	0.293	170	1600	150 (PT6A-6, 6A, 6B, 6/C20, 20, 20A, 20B, 25, 25A, 25C, 34B) 150 or 250 when engine has a wet spline starter generator arrangement -see installation manuals for details (PT6A-11, 11AG, 15AG, 21, 27, 28, 34, 34AG, 36, 110, 112, 135) 250 (PT6A-35, 38, 41, 42, 42A, 41AG, 45, 45A, 45B, 45R, 52, 60A, 60AG, 61, 65B, 65R, 65AR, 65AG, - 114, 114A, 116, 121, 135A, 140, 140AG, 140 ^a PT6B-35F, PT6D-114A)
Vacuum Pump	CC	0.103 0.1019 (-140, -140AG, - 140A)	60	800	25
Hydraulic Pump	CC	0.203 0.2041 (-140, -140AG, - 140A)	150	800	25
Aircraft Accessory Drive	C	0.321	135	800	25

NOTE 4.(continued)

Driven by Power Turbine	Rotating Facing Drive Pad	Speed Ratio (to Turbine)	Maximum Torque		Maximum Overhang (in. - lbs.)
			Continuous	Static	
Tachometer (Tachometer and overspeed governor for PT6A-6,-6A,-6B and-20 only)	C	0.1264 (PT6A-15AG, -25C,-27,-28,-29,-34, -34B,-34AG,-35,-36,-38,-41,-41AG,-42, -42A,-52, -61) 0.1273 (PT6A-6,-6A,-6B,-11,-11AG,-20, -20A,-20B,-6/C20,-21,-25,-25A,-110,-112 -114, 114A, -116, 121,-135,-135A); 0.1405 (45, 45A, 45B, 45R, 60A, 60AG, 65B, 65R, 65AR, 65AG) 0.1286 (-140, -140AG, -140A)	7	100	10
Propeller Governor and Overspeed Governor*	C	0.1264 (PT6A-15AG, -25C,-27,-28,-29,-34,-34B, -34AG,-35,-36,-38,-41,-41AG,-42,-42A,-52, -61) 0.1273 (PT6A-6,-6A,-6B,-11,-11AG,-20,-20A,- 20B,-6/C20,-21,-25,-25A,-110,-112, -114, 114A, -116, 121,-135,-135A); 0.1405 (PT6A-45, 45A, 45B, 45R, 60A, 60AG, 65B, 65R, 65AR, 65AG) 0.1286 (-140, -140AG, -140A)	50	850	25
* May be an optional drive, which is not included in the basic engine weight, is included.					
The hydraulic pump drive requires the aircraft accessory drive to complete the train.					
Cabin pressurization may be provided by the approved combination of the Beech Aircraft Corporation Gearbox No. 50-9903 with the Godfrey Engineering type 9 cabin supercharger, mounted directly on the accessories gearbox.					
PT6A-38,-41,-41AG,-42,-42A are approved for operation with an accessory mounted on the reduction gearbox and belt driven from the propeller assembly provided that the accessory is mounted and driven in accordance with the location dimensions and weight prescribed in Sheet 5 of Drawing Number 3018500, revision dated August 20, 1973.					
C = Clockwise CC = Counterclockwise					

PT6A-50 only

Driven by Gas Generator Turbine	Rotating Facing Drive Pad	Speed Ratio (to Turbine)	Maximum Torque		Maximum Overhang (in. - lbs.)
			Continuous	Static	
Tachometer Accessory Gearbox	CC	0.112	7	100	10
Starter and/or Generator	C	0.293	170	1600	230
Hydraulic Pump*	CC	0.204	150	800	30
Driven by Power Turbine					
Tachometer	CC	0.1400	7	100	10
Alternator	C	0.529	120	1600	105
Prop. Governor	CC	0.1400	100	1700	40
Prop. Overspeed Governor	CC	0.1400	50	850	25

NOTE 5**MODEL DESCRIPTION:**

<u>Model</u>	<u>Characteristics</u>
PT6A-6	Basic model
PT6A-6A	Incorporates provisions for reversing propeller.
PT6A-6B	Incorporates provisions for reversing propeller, PT6A-20 mechanism.
PT6B-9	Single stage reduction gearing. (Output shaft speed 6,230 r.p.m.)
PT6A-20	Maximum continuous rating equal to takeoff. Provisions for reversing.
PT6A-20A	Similar to PT6A-20 except for exhaust port configuration and optional propeller reversing system.
PT6A-20B	Similar to PT6A-20 except for optional propeller reversing system.
PT6A-11	Similar to PT6A-21 except derated.
PT6A-11AG	Similar to PT6A-11, intended for agricultural aviation. Permissible rotor component lives, overhaul, inspection intervals and fuel requirements are listed in PWC Engine Service Bulletin Nos. 12102, 12103, and 12144 respectively.
PT6A-15AG	Similar to PT6A-27, intended for agricultural aviation. Permissible rotor component lives, overhaul inspection intervals and fuel requirements are listed in PWC Engine Service Bulletin Nos. 12102, 12103, and 12144 respectively.
PT6A-6/C20	Similar to PT6A-20 except this configuration previously PT6A-6 converted to PT6A-20 by service bulletin.
PT6A-21	Similar to PT6A-27 except derated.
PT6A-25	Similar to PT6A-27 except for modifications required for inverted flight optional torque controller, and aluminum alloy castings.
PT6A-25A	Similar to PT6A-25 except for magnesium alloy major castings in place of aluminum alloy.
PT6A-25C	Similar to PT6A-25A except for A-34 hot section; T-3B first stage compressor blades and long inducer propeller; A-100 large bore reduction gears; and A-25A installation features. Ratings and limits are the same as the A-34.
PT6A-27	Features higher ratings, revised engine parts and integrated propeller reversing control.
PT6A-28	Similar to PT6A-27 except for higher inter-turbine temperature limit.
PT6A-29	Features higher ratings, revised first stage reduction gearing.
PT6A-34	Similar to PT6A-27 except incorporates a compressor turbine similar to PT6T-3 for higher ratings.
PT6A-34B	Similar to PT6A-34, except for aluminum alloy major castings in place of magnesium alloy.
PT6A-34AG	Similar to PT6A-34, intended for agricultural aviation. Permissible rotor component lives, overhaul, inspection intervals and fuel requirements are listed in P&WACL Engine Service Bulletin Nos. 1302, 1303, and 1344 respectively.
PT6A-35	Similar to PT6A-135 but incorporating the reduction gearbox of the PT6A-34.
PT6A-36	Similar to PT6A-34 except for increased turbine inlet temperature limits.
PT6A-38	Similar to PT6A-41 except derated.
PT6A-40	Similar to PT6A-42 except for increased flat rating and manual fuel control override. This model is withdrawn.
PT6A-41	Features an enlarged compressor and two stage power turbine for higher ratings.
PT6A-41AG	Similar to PT6A-41, intended for agricultural aviation.
PT6A-42	Similar to PT6A-41 except for increased cruise rating and increased inter-turbine temperature limits with improved compressor and reduced loss exhaust ducts.
PT6A-42A	Same as PT6A-42 except for addition of fuel control unit with manual override, compressor wash ring, accessory gearbox chip detector, P3 filter drain, and oil filler neck with check valve.
PT6A-45	Similar to PT6A-41 except for increased ratio reduction gearbox and higher ratings.
PT6A-45A	Similar to PT6A-45 except for increased takeoff rating and increased inter-turbine temperature limits.
PT6A-45B	Similar to PT6A-45A except for increased augmentation fluid flow for takeoff rating to a higher air inlet temperature.
PT6A-45R	Similar to PT6A-45B except for provision for automatic power increase from alternate takeoff power to takeoff power.
PT6A-50	Similar to PT6A-45A except for new reduction gearbox.
PT6A-112	Similar to PT6A-27 except incorporates PT6A-41 fuel system concepts and PT6A-135 reduction gearbox.
PT6A-114	Similar to PT6A-135 with a single port exhaust and PT6A-41 fuel system concepts and PT6A-135 reduction gearbox.

NOTE 5: (continued)

Model	Characteristics
PT6A-114A	Throttle push version of -114 incorporating the -135A compressor, and a new strengthened propeller shaft.
PT6A-135	Similar to PT6A-36 except for new reduction gearbox and higher cruise rating.
PT6A-135A	Similar to PT6A-135 except for increased thermodynamic capability compressor.
PT6A-110	Similar to PT6A-11 except for incorporation of PT6A-135 reduction gearbox.
PT6A-65B	Similar to PT6A-45 except for additional axial compressor stage and increased diameter gas producer turbine wheel.
PT6A-65R	Identical to PT6A-65B except for reserve takeoff rating.
PT6A-65AR	Upated maximum continuous power PT6A-65R.
PT6A-65AG	Similar to PT6A-65, intended for Agricultural Aviation. Ratings similar to the 65AR without automatic reserve power.
PT6A-60	Upated PT6A-42, featuring new first stage compressor gas producer turbine from PT6A-65 and gearbox from PT6A-45. This model is withdrawn.
PT6A-60A	Upated altitude performance PT6A-60.
PT6A-60AG	Similar to PT6A-60A, but with derated max continuous power, and intended for agricultural aviation.
PT6A-61	Similar to PT6A-60 except for PT6A-42 gearbox.
PT6A-61A	Updated altitude performance PT6A-61. This model is withdrawn.
PT6A-116	Similar to PT6A-135 except for reduced takeoff and maximum continuous power and torque limit with PT6A-121 externals.
PT6A-121	Similar to PT6A-21 except for a PT6A-135 reduction gearbox and a PT6A-112 power turbine.
PT6B-35F	Combines the aerodynamic components of the PT6A-135, the mechanical layout of the PT6A-34 and the PT6T-3 generator and exhaust case. Intended for remote drive propeller applications. This model is withdrawn.
PT6D-114A	Based on the PT6A-114A with the main difference being the deletion of the second stage reduction gearing and output shaft. Intended for integration with a combining gearbox incorporated power turbine governors and a propeller output shaft.
PT6A-52	Similar to the PT6A-61 with the PT6A-60A thermal rating.
PT6A-140	Similar to the PT6A-114A with a new RGB for increased mechanical power and improved turbomachinery for increased thermodynamic power.
PT6A-140AG	Similar to PT6A-140 with a dual port exhaust duct and intended for agricultural aviation.
PT6A-140A	Similar to PT6A-140 with a dual port exhaust duct.

NOTE 6 **TYPICAL AIRCRAFT ACCESSORIES, COMPONENTS, OR SYSTEM ASSEMBLIES, WITH AIRCRAFT LEVEL REQUIREMENTS, PROVIDED AS PART OF ENGINE TYPE DESIGN:**

Not Applicable

NOTE 7 **AIRCRAFT ACCESSORIES, COMPONENTS, OR SYSTEM ASSEMBLIES INSTALLED ON THE ENGINE BUT ARE NOT PROVIDED AS PART OF ENGINE TYPE DESIGN:**

Not Applicable

NOTE 8. **SPECIAL ANTI-ICING OR DE-ICING REQUIREMENTS:**

These engines meet FAA requirements for operation in icing conditions when the intake system conforms with the PWC Installation Manual instruction for inertial separation of snow and icing particles; when the alternative approved alcohol system is used, flight in visible moisture is restricted as specified in the PWC Installation Manual.

Fuel anti-icing additives conforming to specifications 3GP526A PFA 55MB, MIL-I-27686E may be used, at a concentration not exceeding 0.15% by volume.

NOTE 9. **ENGINE MOUNT SYSTEM PROVISIONS:**

Refer to Installation Manuals for the engine mount system.

NOTE 10. POWER BOOST, INJECTION OR AUGMENTATION SYSTEMS:

Augmentation fluid, when used, must meet the requirements of PWC Specification CPW No. 328.

NOTE 11. SPECIAL INSTALLATION REQUIREMENTS:

Reversing application the PT6A-6A and PT6A-20 engines must be equipped with Woodward Propeller Governor Type X210XXX.

For PT6A-34, PT6A-34B, PT6A-36, PT6A-45, PT6A-45A and PT6A-45B power may be restored in hot day conditions by means of water or water/methanol injection when accomplished in accordance with the requirements of the PWC Installation Manual.

The following emissions standards promulgated in 14 CFR Part 34, Amendment 5a, effective October 23, 2013, and 40 CFR Part 87, effective October 31, 2012, have been complied with for: PT6A-140, -140AG and -140A.

Fuel Venting Emission Standards: 14 CFR §§ 34.10(b) and 34.11; in addition 40 CFR §§ 87.10(b) and 87.11.

For the PT6A-140, -140AG and -140A the engine manufacturer has declared that compliance has also been demonstrated with the CAEP/6 emission standards in ICAO's Annex 16, Volume II, Third Edition, dated July 2008.

The fuel venting requirements are applicable. The smoke and emissions requirements are not applicable because the PT6A-140 and -140AG at 867 shp (647 kw) and the PT6A-140A at 900shp (671 kw), are under the power threshold of 1000 KW for applicability to turboprops.

Oil Tank Capacity

Total capacity	Useable
2.3 U.S. gallons	1.5 U.S. gallons

For PT6A-25, -25A, -25C

Total capacity	Useable	Useable when inverted
2.8 U.S. gallons	1.5 U.S. gallons	0.25 U.S. gallons

For PT6A-140, -140A, -140AG

Total capacity	Useable
2.36 U.S. gallons	0.98 U.S. gallons

PT6A-50

Total capacity	Useable
3.0 U.S. gallons	1.0 U.S. gallons

For PT6A-65B, -65R, -65AR, -65AG

Total capacity	Useable
2.5 U.S. gallons	1.5 U.S. gallons

Output Shaft

Flanged 4.250" B.C., 8 holes 0.594 ± 0.005" diameter (See P&WC Installation Drawing)

PT6A-50

Flanged 5.125" B.C., 8 holes 0.594 ± 0.005" diameter (See PWC Installation Drawing)

PT6B-9

SAE Aero Std. 84d Spline 1.5 in P.D (See PWC Installation Drawing)

NOTE 12. MANUFACTURER'S SERVICE BULLETINS OR OTHER INSTRUCTIONS COVERING MATTERS OF INTEREST:

Service Bulletins, structural repair manuals, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is Transport Canada approved, are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

Fuel controls approved for each engine model are listed in the applicable Parts Catalog.

NOTE 13. SPECIAL OPERATING PROCEDURES:

Not applicable

NOTE 14.**SPECIAL REPAIR OR OVERHAUL LIMITATIONS:**

Permissible overhaul and inspection intervals are in listed PWC Engine Service Bulletins. PT6A-140, -140A and -140AG permissible overhaul and inspection intervals are listed in the Maintenance Manuals (MM):

Engine Model	Operating Time Between Overhaul and Hot Section Inspection
PT6A-6, 6A, 6B, -34B, -25, -25A, -25C	1003
PT6A-6/C20, -20, -20A, -20B, -21, -27, -28, -135, -135A	1803
PT6A-11, -110, -112, -121	12003
PT6A-11AG	12103
PT6A-15AG	12103
PT6A-34AG	1303
PT6A-34, -35, -36	1403
PT6A-38, -41, -42, -42A	3003
PT6A-45A, -45B, -45R	3303
PT6A-50	4003
PT6A-52, -60A, -61	13303
PT6A-60AG, -65AG	13203
PT6A-65AR, -65B, -65R	13003
PT6A-114, -114A, ,	1703
PT6A-140	3075742 (MM)
PT6A-140A	3077182 (MM)
PT6A-140AG	3079582 (MM)
PT6D-114A	1603

The following engines may be overhauled or maintained as two modules, the gas generator module and the power section module. The separation point is the "C" flange. The module part numbers are listed below.

Engine Model	Gas Generator Module	Power Section Module
PT6A-45A	A 3030300	A 3030200
PT6A-45B	2A 3030300	A 3030200
PT6A-45R	3A 3030300	A 3030200
PT6A-50	3031300	3031200
PT6A-52	3072558	3072555
PT6A-60A, -60AG	3102600	3102000
PT6A-61	3102600	3103300
PT6A-65B, -65R, -65AR, -65AG	3100800	3100900
PT6A-140	3076223	3076225
PT6A-140A	3079592	3079593
PT6A-140AG	3079409	3079410

NOTE 15. APPLICABLE INSTALLATION, MAINTENANCE & OVERHAUL MANUALS:

Applicable Installation manual (Pratt & Whitney Canada part numbers) are:

Engine Model	Engine Installation Manual
PT6A-140	3075740
PT6A-140A	3079605
PT6A-140AG	3079575

Applicable Maintenance Manuals and Overhaul manuals (Pratt & Whitney Canada part numbers) are:

Engine Model	Engine Maintenance Manual	Engine Overhaul Manual
PT6A-6, 6A, 6B	3015442	3008103
PT6A-11,-11AG	3030442	3030443
PT6A-20, 20A, 20B, 6/C20	3015442	3011403
PT6A-15AG	3030442	3030443
PT6A-21, 27, 28	3013242	3013243
PT6A-25,-25A	3027542	3027543
PT6A-25C	3032142	3032143
PT6A-34,-34B,-34AG,-36	3021242	3021243
PT6A-35	3058362	3021243
PT6A-38,-41,-42,-42A	3021442	3021443
PT6A-45A,-45B,-45R	3027042	3027043
PT6A-50	3023342	3023343
PT6A-52	3072862	3072863
PT6A-60A,-60AG,-61	3034342	3034343
PT6A-65AG,-65AR,-65B,-65R	3032842	3032843
PT6A-110, -112, -121	3030442	3030443
PT6A-114, -114A, -116, -135, -135A	3043512	3021243
PT6A-140	3075742	3075743
PT6A-140A	3077182	3077183
PT6A-140AG	3079582	3079583

Transport Canada approved Parts List for the first production PT6A-140 engine – Engine assembly drawing no, 3076226 change A and subsequent.

Transport Canada approved Parts List for the first production PT6A-140A engine – Engine assembly drawing no, 3079594 change A and subsequent.

Transport Canada approved Parts List for the first production PT6A-140AG engine – Engine assembly drawing no, 3079411 change A and subsequent.

NOTE 16. IMPORT REQUIREMENTS:

To be considered eligible for installation on U.S. registered aircraft, each engine to be exported to the United States shall be accompanied by a Certificate of Airworthiness for export or certifying statement endorsed by the exporting cognizant civil airworthiness authority which contains the following language:

- (1) This engine conforms to its United States type design (Type Certificate Number E4EA) and is in a condition for safe operation.
- (2) This engine has been subjected by the manufacturer to a final operational check and is in a proper state of airworthiness.

Reference FAR Section 21.500, which provides for the airworthiness acceptance of aircraft engines or propellers manufactured outside of the U.S. for which a U.S. type certificate has been issued.

Additional guidance is contained in FAA Advisory Circular 21.23, Airworthiness Certification of Civil Aircraft, Engines, Propellers and Related Products, Imported into the United States.

NOTE 17. LIFE LIMITED PART INFORMATION:

Certain parts are life limited. Life limits are listed in PWC Engine Service Bulletins or for the PT6A-140, -140A and -140AG in the AWL section of the Maintenance Manuals (MM):

Engine Model	Service Bulletin/Maintenance Manual
PT6A-6, 6A, 6B, 6/C20,-20,-20A,-20B,-21, 27, 28, 34,-34B,-35,-36,-114,-114A,-135,-135A	1002
PT6A-25,-25A,-25C,	1402
PT6A-11,-110,-112,-121	12002
PT6A-11AG,-15AG	12102
PT6A-34AG	1302
PT6A-38,-41,-42,-42A,-45A,-45B,-45R	3002
PT6A-50	4002
PT6A-52,-60A,-61,-65AR,-65B,-65R	13002
PT6A-60AG,-65AG	13202
PT6A-140	3075742 (MM)
PT6A-140A	3077182 (MM)
PT6A-140AG	3079582 (MM)
PT6D-114A	1602

NOTE 18 MILITARY MODEL INFORMATION:

Not applicable

NOTE 19. ROTOR SPEEDS:

Output Shaft/Propeller Speeds

The normal steady state output shaft operating limit speeds are defined as;

2200 rpm (100%) for the PT6A-6,-6A,-6B,-6/C20,-11,-11AG,-15AG,-20,-20A,-20B,-21,-25,-25A,-25C,-27,-28,-29,-34,-34B,-34AG,-36

2190 rpm (99.6%) for the PT6A-35

2000 rpm (90.7%) for the PT6A-38,-41,-41AG,-42,-42A,-52,-61

1700 rpm (100%) for the PT6A-45,-45A,-45B,-45R,-65B,-65R,-60A,-60AG,-65AR,-65AG

1900 rpm for the PT6A-110,-112,-114,-114A,-116,-121,-135,-135A,-140,-140AG,-140A

1210 rpm (100%) for the PT6A-50

6230 rpm (100%) for the PT6B-9

6188 rpm (100%) for the PT6D-114A and is the normal steady state operating limit.

Output Shaft/Propeller Overspeed Limits

2425 rpm for the PT6A-6,-6A,-6B,-6/C20,-11,-11AG,-15AG,-20,-20A,-20B,-21,-25,-25A,-25C,-27,-28,-29,-34,-34B,-34AG,-36,-41AG

2410 rpm for the PT6A-35

2205 rpm for the PT6A-38,-41,-42,-42A,-52,-61,-62

2090 rpm for the PT6A-110,-112,-114,-114A,-116,-121,-135,-135A,-140,-140A,-140AG

1850 rpm for the PT6A-45,-45A,-45B,-45R,-65B,-65R,-60A,-65AR,-65AG,-60AG

PT6B-9 The maximum output shaft overspeed limit is 110 per cent (6853 rpm) at all ratings and may be used for sustained periods in emergencies. 100 per cent output shaft speed is defined as 6,230 rpm. The limit for normal steady state operation is 105 per cent (6542 rpm). Gas generator speeds up to 102.7 per cent (38,513 RPM) are permissible for 10 seconds and to 101.6 per cent (38,100 rpm) for unlimited periods subject to applicable temperature and other limits. 100 per cent gas generator speed is defined as 37,500 rpm.

PT6D-114A output shaft speed 6807 rpm

NOTE 19. ROTOR SPEEDS: (continued)

100% gas generator speed is defined as 37,468 rpm. Unlimited and limited gas generator speeds are:

Model	Unlimited Speed, rpm	Limited Speed, rpm	Duration
PT6A-6,-6A,-6B,-11,-11AG,-20,-20A,-20B,-6/C20,-21,-25,-25A,-25C,-27,-28,-29,-34,-34B,-34AG,-36,-38,-41	38,100 (101.7%)	38,500 (102.8%)	10 Sec
PT6A-35,-110,-112,-114,-114A,-116,-121,-135,-135A,PT6D-114A	38,100 (101.7%)	38,500 (102.8%)	2 Sec
PT6A-50	38,500 (102.8%)	---	---
PT6A-42,-42A	38,100 (101.7%)	39,000 (104.1%)	10 Sec
PT6A-45,-45A,-45B,-45R,-52,-60A,-60AG,-61,-65B,-65R,-65AR,-65AG	39,000 (104.1%)	---	---
PT6A-140, -140AG, -140A	38,850 (103.7%)	40,000 (106.8%)	20 Sec

NOTE 20. OUTPUT/PROPELLER SHAFT TORQUE LIMITS:

The Maximum allowable steady state and acceleration torque, as measured by the torquemeter, are:

<u>Model</u>	<u>Continuous lb. Ft.</u>	<u>Transient Acceleration lb. Ft.</u>
PT6A-11, 11AG	1194	1500
PT6A-6, 6A, 6B, 20, 20A, 20B, 6/C20, 21, 25, 25A	1315	1500
PT6A-15AG, 27	1628	2100
PT6A-28	1786	2100
PT6A-29, 34, 34B, 34AG, 35, 36, 25C	1970	2100
PT6A-38	1970	2750
PT6A-41, 41AG, 42, 42A	2230	2750
PT6A-45, 45A, 45B	3625	5100
PT6A-45R	3625	5100
PT6A-50	4860	5900
PT6A-135, 135A	2080	2400
PT6B-9	464	---
PT6A-112	1480	1900
PT6A-110	1313	1700
PT6A-60A, 60AG	3625	5100
PT6A-61	2230	2750
PT6A-65B	3625	5100
PT6A-65R	4250 (3800 Alternative Takeoff)	5100
PT6A-114, 114A	1980	2400
PT6A-121	1710	2200
PT6A-65AR	4400(3800 Alternative Takeoff)	5100
PT6A-116	1940	2400
PT6A-65AG	3800	5100
PT6D-114A	610	740
PT6A-52	2230	2750
PT6A-140	2500	2625
PT6A-140A	2600	2950
PT6A-140AG	2500	2800

NOTE 21.**MAXIMUM PERMISSIBLE COMPRESSOR AIR BLEEDS:**

External airbleed shall not exceed 5.25%, except as specified in specific installation manuals. A maximum of 1.5 lbs. per minute may be bled during starting. Bleed air meets the requirements of Paragraph 3.18 of MIL-E-5007C.

NOTE 22.**ROTOR DISK INTEGRITY AND ROTOR BLADE CONTAINMENT:(where special requirements apply)**

These engines also meet FAA requirements for adequate disk integrity and rotor blade containment and do not require external armoring.

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